

USAToday - Automobile 'black boxes' ready to roll  
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SALT LAKE CITY (AP) - A car rolls onto the highway in the middle of the night and a signal is sent to the nearest 911 center. Within seconds, emergency workers know how fast the car was going, where it crashed, who was inside and whether they were wearing seat belts.

The technology is within reach, according to experts who presented a prototype of the Automatic Crash Notification System at the National Emergency Number Association conference Monday.

"It's not here today, but it's right around the corner," said Stephen Meer of SCC Communications Corp., a 911 routing company that was part of the demonstration.

The system is based on a so-called "black box" - nicknamed after the devices that record altitude and other flight data on planes - built by an Alexandria, Va.-based company called Veridian.

The box uses sensors to record the speed a car is traveling and the point of impact, and then radios that information into a central communication system when a crash occurs.

A global positioning system embedded in the box tells the network how to relay the call to a local 911 number, transmitting the crash information to the dispatcher on the ground. That data can then be relayed to a hospital or trauma center to feed information about the crash to doctors or paramedics on their way to the accident.

The idea of crash notification is not new; General Motors and other car companies already install systems such as OnStar in some models. Proponents of the new technology call those systems basic.

"That says there was a frontal crash, yes or no," said Doug Funke, transportation sector program manager for Veridian. "But we know was it side impact, was it the left side, did the car roll over, what was the car's final resting position - on the side or the roof - as well as the car's actual location."

The new system also meshes with traditional 911 operations, said Meer, who helped design a routing network for calls. That means emergency systems won't have to be overhauled each time another company invents a new black box.

The system was tested earlier this month, when Veridian wired two cars and crashed them near Niagara Falls, N.Y. The emergency services department in Harris County, Texas, which covers Houston and its suburbs, signed on in advance to take the call.

When the cars slammed together, the black box data was instantly transmitted to SCC's home base in Boulder, Colo., and relayed to Houston's 911 number.

In less than a minute, dispatchers at the Houston Fire Department read the crash data and decided how many engines and paramedics to send (because the crash was in New York, no crews were actually dispatched). Within five minutes, the crash data was translated into a computer model that could be read by doctors.

That final step - which will eventually include information about the ages of passengers and crumple zones of specific makes of car - isn't yet ready for the mass market.

But it will be soon. Response Services Center, a subsidiary of AAA, has paired up with SCC and plans to offer an emergency notification system to consumers in 2001. Experts predict the technology will become as standard as seat belts and air bags in just a few years.

"I envision you being able to go to Radio Shack in the next year and buy a box and put it into your '79 Pinto," said John Melcher, director of emergency services for Harris County, Texas. "I know it's going to save lives."

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